

**REMARKS**

Applicants wish to thank the Examiner for considering the present application. In the Office Action dated March 14, 2003, claims 1-32 are pending in the application. Applicants respectfully request the Examiner for a reconsideration.

The Examiner has suggested alternate wording for claims 1, 22, 14, and 15. Applicants have adopted these changes and now believe these claims are allowable.

Claims 15 and 16 stand rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention.

Claims 15 and 16 have both been amended to clarify the “reconfigurable optical transmitter.” Applicants believe that this rejection is now overcome.

Claims 1 and 22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold et al* (6,477,153) in view of *Rockwell* (6,327,063).

Applicants have amended claim 1 to clarify that the present invention contemplates two different subsets from the same plurality of satellites. Claim 1 has been amended to state “said plurality of satellites arranged to have a second subset of satellites having at least one satellite different than that of said first subset and at least one second satellite the same as the first subset.” That is, the present invention contemplates the use of satellites that are constantly reconfigured. As the satellites move relative to the earth, the satellites will be

reconfigured into different subsets. The subsets are not completely different groups of satellites in that at least one satellite will be the same in the first subset and the second subset and at least one satellite different from all of the satellites in the first subset will be part of the second subset.

The *Leopold* reference teaches two different groups of satellites that intercommunicate. The satellites are located at different locations and are connected by one intersatellite link. Thus, the *Leopold* reference cannot have a subset of satellites having at least one satellite different than that of the first subset and one satellite the same as the first subset. The position of the two groups of satellites are relatively fixed. The *Leopold* system can adjust for differences in position and distance. However, the satellite system of *Leopold* is not reconfigurable as recited in claim 1.

The *Rockwell* reference is cited for showing reconfigurability of the optical transmitter and optical receiver. The *Rockwell* reference is directed to a reconfigurable laser communication terminal. However, no teaching or suggestion is provided in the *Rockwell* reference for using the reconfigurable communications terminal to form different groups or subsets of satellites. The *Rockwell* reference merely describes a network that may use such a device to change the communication frequencies between the satellites. No teaching or suggestion is found for reconfiguring a plurality of satellites into a first subset and a second subset.

Additionally, Claim 22 recites that the second subset of satellites supersedes the first set of satellites. That is, the first subset of satellites no

longer exists after the second subset of satellites is formed. This is clearly not taught or suggested in the *Leopold* reference. The *Leopold* reference has both sets of satellites using an intersatellite link.

Neither reference teaches or suggests one subset having at least one satellite the same as a satellite from the previous subset or superseding a first subset of satellites with a second subset and, therefore, claims 1 and 22 are believed to be allowable.

Claims 2, 3, 6-9, 23, 24 and 27 are rejected under 35 U.S.C.103(a) as being unpatentable over *Leopold et al.* in view of *Rockwell* and further in view of *Wainfan et al.* (USP 6,032,041).

Claims 2, 3, 6-9, 23, 24, and 27 are dependent on claims 1 and 22. Applicants respectfully traverse. Claims 2, 3, 6-9, 2, 24, and 27 are further limitations of claims 1 and 22. These claims are therefore believed to be allowable for the same reasons set forth above. The *Wainfan* reference fails to teach or suggest the use of a first subset and a second subset as recited in claims 1 and 22. Therefore, Applicants respectfully request the Examiner for reconsideration of this rejection as well.

Claims 4, 5, 25, and 26 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold* in view of *Rockwell* in further view of *Koch* (5,394,489). Applicants respectfully traverse. Claims 4 and 5 and 25 and 26 are further limitations of claims 1 and 22. The *Koch* reference fails to teach or suggest the use of the subsets as recited in claims 1 and 22. Therefore, these

claims are also believed to be allowable for the same reasons set forth above with respect to claims 1 and 22.

Claim 10 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold* in view of *Rockwell* in further view of *Kintis* (5,661,582). Claim 10 is a further limitation of claim 1 and is believed to be allowable for the same reasons set forth above with respect to claim 1.

Claims 11, 28, and 29 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold* in view of *Kintis*.

Claim 11 is directed to a global communication system as a plurality of satellites spaced about the earth. The first subset of satellites forms a local area network over a landmass. The first subset has a first plurality of optical carriers assigned thereto for intercommunication. The first subset of satellites has a second plurality of optical carriers assigned thereto for communicating with other satellites outside of the first subset. The Examiner states that *Leopold* does not teach the first plurality of optical carriers for intercommunication and a second plurality of optical carriers is assigned for communicating with other satellites outside the subset. The *Kintis* reference is cited for this purpose. The Examiner directs the Applicants to Figure 2, Col. 4, lines 1-62, and Col. 5, lines 1-67. The discussion therein appears to be directed only to distribution of optical signals onboard the satellite which receives the signals via distribution means. No teaching or suggestion, however, is provided for “having a first plurality of optical carriers assigned for intercommunication” and “a second plurality of optical carriers assigned thereto for communicating with other

satellites.” Therefore, Applicants respectfully request the Examiner to reconsider claim 11.

Claim 28 is similar to claim 11 in that a first plurality of optical carriers is assigned for intercommunication and a second plurality of optical carriers is assigned for intercommunication within a second subset of satellites. Claim 28 further recites “a third plurality of optical carriers assigned thereto for communicating with the second subset.” Therefore, claim 28 is believed to be allowable for the same reasons set forth above with respect to claim 11.

Claims 12 and 13 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold* in view of *Kintis* in further view of *Wainfan*. Claims 12 and 13 are further limitations of claim 1 and are believed to be allowable for the same reasons set forth above.

Claims 17-21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold* in view of *Wainfan*. Claims 17-21 are believed to be allowable for the same reasons set forth above with respect to claim 1.

Claim 14 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold* in view of *Kintis* and in further view of *Rockwell*. Claim 14 is a further limitation of claim 1 and is believed to be allowable for the same reasons set forth above.


Claim 30 stands rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold*. Applicants respectfully traverse. Claim 30 is similar to claim 22 in that a first plurality of satellites is grouped into a first local area network. Claim 30 also recites the step of “superseding said first subset by a second subset

of a plurality of satellites into a second local area network so that at least one of the first subset is different than said second subset.” No teaching or suggestion is found in the *Leopold* reference for superseding the first subset with the second subset. Applicants therefore respectfully request the Examiner for reconsideration of this rejection.

Claims 31 and 32 stand rejected under 35 U.S.C. §103(a) as being unpatentable over *Leopold* in view of *Rockwell*. As mentioned, the *Leopold* reference does not teach superseding the first subset by grouping a second subset of the plurality of satellites into a second local area network. Applicants therefore respectfully request the Examiner for reconsideration of claims 31 and 32 for the same reasons set forth above with respect to claim 30.

Should the Examiner have any questions or comments, the Examiner is respectfully requested to contact the undersigned attorney.

Respectfully submitted,

  
Vijayalakshmi D. Duraiswamy  
Reg. No. 31,505

Date: May 19, 2003  
HUGHES ELECTRONICS CORPORATION  
ES/001/M.S. A109  
P. O. Box 956  
El Segundo, CA 90245-0956  
Telephone: (310) 662-9919